Research & Occasional Paper Series: CSHE.4.2020

# SOUTH KOREA'S HIGHER EDUCATION SYSTEM THROUGH CALIFORNIA EYES

May 2020\*

# John Aubrey Douglass University of California Berkeley

Copyright 2020 John Aubrey Douglass, all rights reserved.

## **ABSTRACT**

Like California, South Korea's system of higher education is a work in progress. Each must evolve and reshape themselves at various points in their histories in their quest for relevancy and, increasingly, to external pressures and demands of governments and, more generally, society. Utilizing California's pioneering higher education system as a comparative lens, I provide an outsider's view of South Korea's higher education system from two perspectives. First, a national system viewpoint: How is the higher education eco-system organized and managed, and what funding and other incentives are provided by the national government? The second is an institutional viewpoint: What is the academic and management culture of national universities and how might they seek self-improvement and a greater impact on their regional role? In pursuing this analysis, I leverage my knowledge and research related to California's efforts to build its mass higher education system with institutions of high quality and world prestige as well as aspects of my New Flagship University model that focus on institutional self-improvement and management. Two general observations are offered: First, Korea needs to reorganize its network of public and private tertiary institutions; that includes reducing the number of private institutions, while also improving regional role and impact of its public institutions. Second, a major challenge for Korea, in my view, is to deemphasize the race for rankings and to focus more on the internal management capacity of institutions, and to pursue a more holistic societal role for its universities. The New Flagship University model is one way to examine this issue for Korea.

Keywords: South Korea, California, Multi-Campus Systems, New Flagship University Model

Like California, South Korea's system of higher education is a work in progress. Each must evolve and reshape themselves at various points in their histories in their quest for relevancy and, increasingly, to external pressures and demands of governments and, more generally, society. Utilizing California's pioneering higher-education system as a comparative lens, the following provides an outsider's view of South Korea's higher-education system from two perspectives.

First, a national system viewpoint: How is the higher education eco-system organized and managed, and what funding and other incentives are provided by the national government? Second, an institutional viewpoint: What is the academic and management culture of national universities and how might they seek self-improvement and a greater impact on their regional role?

In pursuing this analysis, I will leverage my knowledge and research related to California's efforts to build its mass highereducation system with institutions of high quality and world prestige and reflect on aspects of my New Flagship University model that focus on institutional self-improvement and management.<sup>1</sup>

# 1. KOREA AND CALIFORNIA

How do Korea and California compare in the composition and challenges they face in managing their higher education systems? The state of California is an appropriate unit of analysis, as state governments in the U.S. have the primary responsibility for

<sup>\*</sup> This essay was written at the request of South Korea's President's Council on Education and presented at the Korea/OECD conference held in Ilsan, Republic of Korea, on October 24, 2019. Since then, the COVID-19 pandemic has struck the world, and much has changed in the landscape of higher education in Asia and globally.

organizing, funding, and coordinating their respective higher-education systems. The financial health and capacity of state governments in the U.S. are perhaps the largest single influence on the vibrancy and future higher education in the U.S. — or in other words, how goes state governments, so goes public higher education. The size of their economies and the total population of South Korea and California is also similar — although the composition and trajectories are very different.

Both Korea and California have also faced significant financial problems related to funding higher education over the last three or more decades, accelerated mightily with the Great Recession in California. Even with economies that rank 11<sup>th</sup> and seventh in the world (if California was a counted as a country), the capacity of both governments to financially sustain their college and university sectors has declined within the context of growing costs for social welfare programs (pensions, health, aging populations).

Similarly, increased educational attainment rates have fueled economic development in both Korea and California over the past 50 or more years. Like other parts of Asia, families and students in Korea highly value education and properly view it as a vital component in socio-economic mobility, social status, and future earnings. A staggering 70 percent of 24- to 35-year-olds in the nation of 51.5 million people have completed some form of tertiary education — mostly at the university level.

Yet there are major differences between the two nation-states. While Korea has about 52 million people and California has a population of nearly 41 million, California is projected to continue to grow in population to some 60 million by 2050, fueled in part by immigration. Korea faces the difficulties of a slow and then projected severe decline in its population, falling below 40 million people by 2055. One primary reason? Declining fertility rates, despite significant government efforts to create subsidies and other incentives for Koreans to have children. With limited in-migration to Korea, this means a shrinking cohort of potential college-age students.

Between 2011 and 2016, the number of Korean students who entered higher-education programs declined by 10 percent. The number of students entering universities in 2023 is expected to be reduced by 160,000 compared to 2013. At the same time, unemployment rate for 15- to 29-year-olds, most of whom have a tertiary degree, is now about 9.5 percent, indicating a disjuncture in degree-attainment rates and the labor market in Korea.

While the number of older students has grown and Korea's Ministry of Education (MOE) has ambitious goals and programs to recruit and enroll international students, particularly from China, this has not altered a basic reality: Korea must shrink and restructure its mature network of higher-education institutions that comprise 43 national universities, a vast array of private and largely non-profit institutions that include some 180 private "universities," and some 159 Junior and Technical Colleges (almost all private). Even with the attempt to bolster options for vocational education, including "miester" schools, for prestige and a sense of greater economic gain, most students are in the public and private university sector, many of which are for-profit enterprises.

With continued financial troubles — and continued declines in population only marginally mitigated by international student demand — one can anticipate an acceleration in mergers and the closing of many more institutions, particularly among the many small private institutions. In previous decades, Korea met increased demand for higher education primarily by promoting the establishment of private institutions as opposed to public institutions (which is California's model). Today, these higher-education institutions (HEI) enroll some 80 percent of all the students in South Korea who receive some public funding, but they rely mostly on tuition income, which represents some 70 percent of all revenue for four-year private institutions. The net effect is that some 45 percent of the national cost for its higher-education system in Korea is funded by students and their families.<sup>2</sup>

As part of the agenda to reorganize Korea's higher-education system, the MOE is exploring eventually integrating all national universities into one large, multi-university system. The goal, as one recent report notes, "is to reduce competition between institutions and equalize the chances of graduates in Korea's cutthroat labor market, which is heavily skewed toward graduates of Seoul's top universities." Raising the quality and profile of national universities outside of Seoul also is part of a longer-term government strategy to bolster regional economies, retain local talent, and enhance the reputation of Korea as a destination for international students and businesses.

There are also, as indicated, significant differences in the organization, autonomy, and composition of Korea's and California's higher-education systems. Korea also has 17 administrative divisions: nine provinces, six metropolitan cities — which have equal status to the provinces — and Seoul, which is designated as a special city. And while there has been some decentralization of authority for higher education to each of the HEI's, higher education remains highly centralized under the authority of MOE as

exemplified by public funding schemes for both public and private higher education and an increasing array of accountability requirements.

In contrast, California has three public multi-campus "segments" — the University of California, the California State University and the California Community Colleges — each managed by relatively autonomous governing boards and "systemwide" administrations. And while Korea's higher-education system must seek consolidation, California's must seek a path for logically and economically growing its network of public universities and colleges. Some 75 percent of all students in California attend public institutions; within the public sector, some 75 percent are enrolled in the state's network of 113 community colleges. Only a quarter of all enrollments are in the private, mostly non-profit HEI sector. Still, the private sector is important with outstanding universities such as Stanford and Caltech.

California's population and economy continue to grow. Even so, in the immediate aftermath of the Great Recession, funding from the state of California for public higher education declined by a staggering pace — a 39 percent decline in funding over less than a four-year period, driving up student-to-faculty ratios. Since then, repeated tuition and fee increases have only partially mitigated the loss in funding. One consequence is that the coherency of the system, with a highly differentiated network of colleges and universities, is breaking down. Hence, the challenges are perhaps different from Korea, yet they are similar in magnitude.

At the same time, California faces significant challenges related to income inequality, poverty, and homelessness. It also must confront a different disjuncture in the labor market than Korea — the state has a growing imbalance between the production of people with bachelor's degrees and the labor market. Further, there is an imbalance in the awarding of doctoral degrees, particularly in STEM fields, and the needs of the labor market.

California has dealt with this problem in part by attracting talent from throughout the world. Many students who enroll doctoral programs at public and private universities in the state then find ways to enter the labor market either with visas or by becoming citizens. Yet this historically important pathway to meet talent needs of high technology and similar economic sectors has become more fragile. Increased restrictions on student and other types of visas, and the rhetoric and demonizing of immigrants by President Trump and his administration, could have a significant impact on the flow of academic talent to the state.

### 2. CALIFORNIA'S MODEL

These similarities and differences noted, what can Korea learn from California's pioneering system of public higher education? It's a complex question that I can, perhaps, only partially answer.

Korea needs to reorganize its network of public and private tertiary institutions, including reducing the number of private institutions, while also improving regional role and impact of its public institutions; California needs, I would argue, to also reorganize as well and create a revised financial model to grow and modify its system. For example, too many students are enrolled in community colleges where costs are cheaper. But drop-out rates are high at these institutions, while two-year degree production is low and does not always match the needs of the labor market. Hence, while different in circumstance, both have a disjuncture in the degree output of their HEI's and the labor market.

That said, and considering the reform agenda of the MOE, there are two aspects of California's system that may be beneficial to policymakers in Korea:

- The first is the concept of highly mission differentiated public multi-campus systems, each with their own governing board and role in the larger higher-education system, but with coordination in a number of key policy areas.
- The second is how the University of California (UC) operates as a federated system under what is termed the "One-University" model. This model has been extremely successful and, with the MOE proposal for integrating national universities into some form of a system, this multi-campus approach to governance and management may be informative.

#### 2.a. California's Tripartite System

How and why California built this remarkable system is a story of institution building that has arguably resulted in one of the most influential higher education models in the world.<sup>4</sup> It also had been tremendously efficient, leading the nation throughout most of the 20<sup>th</sup> century in access and graduation rates at a relatively low cost to taxpayers. California created the first coherent system of institutions built around the innovation of the two-year community college, a set of regional colleges largely granting degrees up to the masters (California State University or CSU), and a high-quality multi-campus research university with doctoral programs (UC), linked in part by the ability of students to bank credits and transfer from one institution to another. Hence, a

student can enter a local community college, and then transfer at the junior year to a CSU or UC campus and eventually graduate with a bachelor's degree.

Beginning as early as the 1920s, this system emerged, strengthened by the ability for a student to transfer from a local community college (originally called junior colleges) to the University of California. In 1960, California developed its "Master Plan for Higher Education" that strengthened this existing model of higher-education institutions as part of an effort to plan for large-scale enrollment and program growth.

The net result is a highly differentiated network of public colleges and universities, each with their own governing boards (see Figure 1) and distinct missions in which to excel. The institutions are geographically dispersed and placed largely in important population centers to promote access and economic activity, and to provide multiple pathways for students to enter the system and progress to a degree or credential — from a two-year associate of arts degree to a doctorate. Today this tripartite system includes:

Figure 1: Governance of California's Public Higher Education System 2019 Mostly CALIFORNIA STATE LEGISLATURE/GOVERNOR Budgetary Controls Budgetary & Statutory Controls California State University Board of Trustees University of California Board Statutory/Est 1968 Statutory/Est 1960 Constitutional/Est 1868 Chancellor, CCC Statutory/Appointed Chancellor, CSU Statutory/Appointed President, UC ocal Community Colleg District Boards (Statutory/Elected) 113 Community Colleges 23 CSU Campuses 10 Campuses First Campus Est. 1910 First Campus Est. 1857 First Campus Est. 1868

The University of California is the state's primary academic research institution, drawing students from throughout the state and internationally. The University of California has 10 major campuses, five medical centers, and three national laboratories. The university brings in around \$1 billion in federal research funds each year. Six of the schools — Berkeley, Davis, Irvine, Los Angeles, San Diego, and Santa Barbara — are members of the Association of American Universities (AAU), along with 56 other top research-intensive universities in North America.

The UC system is constitutionally independent of the state and is governed by a 26-member board of regents. UC educates almost 250,000 undergraduate and graduate students and is the state's primary awarder of doctoral and professional degrees. The UC is highly selective: Only the top eighth of high-school graduates are eligible for admission.

The California State University is the largest university system in the nation. CSU provides undergraduate and graduate instruction to approximately 485,000 students on its 23 campuses. The vast majority of students are undergraduates, but CSU awards master's and doctoral degrees in a few professional fields and trains a majority of the state's K–12 teachers. CSU awards more bachelor's degrees than any other segment of higher education in California. The top third of high-school graduates are eligible for admission to CSU. The CSU system is governed by a 25-member board of trustees; most are appointed by the governor and confirmed by the senate.

The California Community Colleges constitute the nation's largest higher education system. The state's community colleges enroll 2.1 million students (about 900,000 on a full-time equivalent basis) at 113 colleges that are organized into 72 districts. In 2018, the community colleges awarded more than 60,000 certificates and 107,000 associate degrees and transferred more than 105,000 students to four-year institutions. Compared to other states, California relies more heavily on community colleges and less on four-year institutions — the state ranks fifth nationwide in the share of recent high-school graduates who enroll in community colleges and 47th in the share who start at four-year schools

Coordination of this system includes:

- Mission differentiation: As noted, each public "segment" has a distinct and complimentary role outlined in California law.
- Admissions Pools: UC and CSU coordinate admissions requirements, specifically high school course requirements.
- Outreach: UC and CSU attempt to coordinate outreach to local schools, including programs to encourage students to
  prepare for college and curricular/support programs for teachers and school leaders.

Transfer Function: There is coordination of policies for transfer of students mostly from community colleges to CSU and UC at the junior year, but also from private HEI's. The transfer function is an essential component of the commitment to access. Today, some 25 percent of all undergraduates at UC campuses are transfer students; at CSU the total is close to 40 percent. To facilitate the transfer function, both UC and CSU have policies to have a lower division (first two years of a four-year program of courses) to upper division ratio of 40:60 to provide room for the enrollment of community-college students.

#### 2.b. UC's One University Model

The University of California is the state's flagship university with a broad and expanding mission<sup>5</sup>. It consists of ten campuses, nine of which have comprehensive academic programs providing undergraduate and graduate education, research, and public service; UC San Francisco is the one campus devoted only to medical education and research. Berkeley was the first campus, established in 1868.

To meet the needs of growing population in Southern California, in 1919 a second campus was established, which became UCLA. Other UC campuses followed including Santa Barbara in 1944, Davis and Riverside in the 1950s, and San Diego, Irvine, and Santa Cruz in the 1960s. The most recent campus is UC Merced in California's Central Valley, which opened in 2005.

Today, UC enrolls a total of 240,000 students, 28 percent of whom are in graduate degree programs. UC also operates a large extension program that dates back to the late 1800s and provides courses and programs for professionals and to support local and regional businesses and communities.

With ten campuses mostly based in major population centers, the University of California is a large actor in California's economy and in its social and cultural life. With expenditures of about \$26.7 billion, much of that in the form of salaries, wages, and benefits, UC annually generates more than \$46 billion in economic activity in California.

UC faculty and researchers secure nearly nine percent of all academic research and development grants coming from Washington, D.C.. The federal government alone accounts for nearly 30 percent of UC's total revenues, far exceeding the investment by the state. In total, UC generates approximately \$14 dollars in economic output for every dollar of state taxpayer money invested.<sup>6</sup> In addition, because of the success of its teaching, research, and public-service operations, UC is the state's third largest employer and is a major source of start-up business and other economic activity.

UC's Board of Regents has responsibility for overseeing the management of the system, including appointing UC's president and the chancellors for each campus. UC's "One-University" model provides coherence to the system in key policy areas, including undergraduate admissions standards, the hiring and advancement of faculty, and a UC-wide process for reviewing existing and new degree programs. UC also has a history of "shared governance" where the Academic Senate, as the representative body of the faculty, has clearly defined responsibilities related to academic management and shared authority with administrators in specific policy areas. The following outlines the main features of the One-University model:

- UC-wide Organization: The organization consists of a governing board (the UC Regents) with lay members, a systemwide UC Office of the President (UCOP) with a chief executive (the UC President), campus chancellors, and the Academic Senate (representative body of the faculty) under the concept of "shared governance." Specific authority is granted to the Senate including admissions policies, curriculum and degree programs, and shared authority on faculty hiring and advancement.
- Autonomy: UC's governing board, and therefore the university's academic community, have a high level of autonomy in managing the university's academic affairs (including new programs and campuses), as set out in California's state constitution as a "public trust."
- Government Relations: The UC President is the sole university representative in budget negotiations and government relations primary with the state governor and legislature and submits a single systemwide proposed budget.
- Budgets: UC receives funding from the state based on student enrollment at the systemwide level and UCOP disperses this
  workload funding via a largely equitable funding formula to each campus. Campuses control funding generated via research
  grants, donation/gifts, and through services (such as hospitals).
- Shared Academic Personnel and HR Policies: Faculty hiring and advancement is primarily the role of the campus division of the Academic Senate, shared with chancellor/campus provost.
- Coordination of Academic Programs: Through a process of shared governance, there is a process to review campus
  proposal for new academic degree programs and schools, which take into account regional and statewide labor needs and
  the financial costs.
- Shared admissions policies: Admissions policies are set at the UCwide level, administered by each campus.

 Shared tuition and financial aid policies: More than 33 percent of all undergraduate tuition goes to financial aid for needy students – what is termed "return to aid."

#### 3. THE NEW FLAGSHIP UNIVERSITY MODEL AND KOREA

In Korea and elsewhere, ministries of education have placed significant resources and pressure on higher-education institutions to improve their performance in research output and markers of prestige, often using global rankings of universities as a benchmark in which to judge improvement. As I discuss below, this is not all bad. For one, greater research productivity and,

therefore, global rankings, along with the adoption of English in many academic degree programs, help attract international students

But another major outcome is a deemphasis on vitally important activities of national universities. A focus on rankings can come at the expense of research that is more relevant to policy and that has an impact on local and regional economies; teaching and learning and the quality of the student experience; and the public-service role of universities.

The challenge for Korea, in my view, is to deemphasize the race for rankings and to focus more on the internal management capacity of institutions and on a more holistic societal role for its universities. The New Flagship University model is one way to examine this issue for Korea.

## 3.a. The NFU Model

The forces of globalization and a campaign by various international university ranking enterprises place too much emphasis on a narrow model of what the best universities should

Productive Learning and Research Environment

Advancement of Individual Human Capabilities

Advancement of Individual Human Capabilities

Contributing to a More Equitable and Prosperous Society

Source: Douglass, The New Flagship University

be. One result: the notion of a "World Class University" (WCU) and the focus on its close relative, global rankings of universities, drives much of the higher-education policymaking of ministries and major universities throughout the globe.

In the book *The New Flagship University: Changing the Paradigm from Global Rankings to National Relevancy*, and in a follow-up, *Envisioning the Asian New Flagship University*, I attempted to update the idea of a national leading university and to outline a holistic picture of its many responsibilities and activities and academic culture, in part by reflecting on the most successful institutions found throughout the world. (In the latter book, a chapter by Stephanie K. Kim and Minho Yeom focuses on South Korea and the applicability of the model. I will return to their observations shortly.)

The New Flagship University (NFU) model purposefully provides an alternative conceptual approach to the rather vague World Class University paradigm that now dominates much of the international discussion. Yet the goal is even more ambitious: To support an institutional culture among a select group of institutions that is self-identified or formally identified by national or even regional governments and that is firmly rooted in their national and regional relevancy. The New Flagship moniker helps to stress that the most productive and engaged universities — those that seek societal relevance — are much more diverse and complex in the range of their activities and goals than at any other time in history. Take almost any current public research university — and some non-profit private ones — and compare their sense of purpose, funding, programs, and expectations of stakeholders, with 50 or even 20 years ago. They are very different.

The New Flagship model is also not a radical construct of the modern university; rather, it is a reframing of the idea of the best and most engaged universities. The model is intended to provide pathways for universities to revisit and, in some instances, reshape their missions and academic cultures; to innovate; and to pursue organizational features intended to expand their relevance in the societies that give them life and purpose.

In this quest, international standards of excellence focused largely on research productivity are not ignored but are framed as only one goal towards supporting a university's productivity and larger social purpose — not as an end unto itself.

Figure 2 captures the larger purpose and objectives of New Flagship Universities, with only one element that is valued and partially captured in the current crop of global and national rankings — the creation of new knowledge. Different types of

universities throughout the world share these objectives. Yet, they have a special meaning for the modern reincarnation of the Flagship University.

Outlining the objectives of these institutions is simply a reference point to a larger, and more challenging, question: What is the path to becoming a New Flagship University — or, for those campuses that already see themselves as having such a status, for expanding on the model?

The logical sequential route is from regional/national engagement, then to global influence. There probably is no shortcut. Hence, one might postulate that a WCU, defined largely by data on research productivity, does not make a Flagship. At the same time, a Flagship is more likely to be a WCU, providing the necessary environment for high-quality research productivity, but not at the expense of the larger public purpose and the soul of the university enterprise.

The two books explore pathways for universities to re-shape or expand their historic mission and academic culture and to pursue organizational features intended to increase their relevancy in the societies that give them life and purpose.

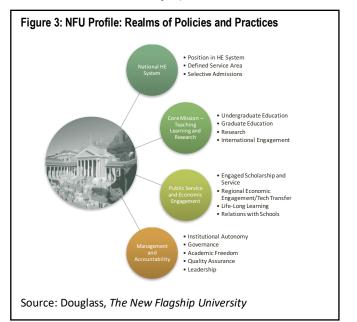
A New Flagship University "profile" is organized in four realms of policies and practices (see Figure 3). Each realm relates to the institution's external responsibilities and internal operations, including a Flagship University's place in national systems of higher education; the expanse of programs and activities related to its "core" mission of teaching and learning and research; old and new notions of public service and approaches to regional and national economic development; and governance, management, and internally derived accountability practices that form a foundation for the New Flagship model.

Each policy realm includes examples of policies and best practices at leading national universities. One important theme is that the path to increased research productivity and improved rankings is not through surgical efforts to boost faculty journal publications, patents, and licenses. Rather, it requires a more holistic approach to shaping the mission, academic culture, and practices of a university to, in essence, take care of the fundamentals outlined in the New Flagship model.

Another theme is that ministerial directives and efforts to force quality improvement and greater productivity, a legitimate concern for all national governments, have limits for expanding the overall social and economic impact of their universities. Ultimately, it will be the internal academic culture and efforts to seek institutional self-improvement that will determine which universities have a greater local, regional, national, and global impact.

The list of policy and practices is not meant as a litmus test for achieving the status of the New Flagship University. Many universities are already fully engaged in many of the characteristics and programs featured in the model. And not all universities, for example, will view the wide range of public and community-service practices described as relevant within their national culture and societal needs.

Resource constraints add another extremely important variable. The existing academic culture of faculty adds yet another constraint, along with issues related to management capacity and the larger political and economic



management capacity and the larger political and economic environment in which universities operate.

This essay cannot fully explore the applicability of the NFU model for Korea, but here are four areas that that may be more fully explored at a later date:

• Improving Undergraduate Students: The drive toward global rankings have often meant a serious neglect of needed reforms of the curriculum and teaching practices of major national universities.

An essential goal of the New Flagship University is to provide first-degree students with an education that is engaging, that promotes creativity and scholarship, and that results in high-order skills that are useful in the labor market, for entry into

graduate education, for good citizenship, and for a fulfilling life. Pedagogical research has generated the concept of engaged learning. This includes two observations: (1) The amount of time and energy students put forth in academic and other pursuits (e.g., community service) is positively correlated to learning and other desired outcomes of undergraduate education; and (2) Institutional policies and practices can influence the level of student engagement.

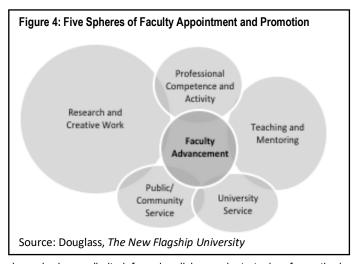
Promoting a Broad Concept of Research: Again, the global ranking and WCU model has led to a devaluing of areas of
research often with local and regional importance, in favor of mainstream research published in internationally recognized
journals. This, in turn, impacts hiring practices and the curriculum of universities.

High levels of research productivity by faculty is a significant characteristic of Flagship Universities, a responsibility that is roughly equal to teaching responsibilities. Research can have a variety of purposes including 1) discovery — basic or blue-sky research that has no immediate application, commercial or otherwise; 2) integration — synthesis of information across disciplines, across topics within a discipline, or across time; 3) engaged scholarship — rigor and application of disciplinary expertise with results that can be shared and that connects the intellectual assets of the institution (that is, faculty expertise) to public issues, such as community, social, cultural, human, and economic development; 4) teaching and learning—systematic study of teaching and learning processes, which differs from scholarly teaching in that it requires a format that will allow public sharing and the opportunity for application and evaluation by others.

 Faculty Appointment and Advancement: Many universities do not have or do not provide to faculty a clear statement of their responsibilities that align with the mission of the institution — and therefore are criteria for their appointment and path to advancement.

The faculty at Flagship Universities need clear outlines of expectations that help shape behaviors and advance the broad range of responsibilities of an institution and that are based on a process of peer review — and not on a civil-service structure. How to evaluate faculty performance and promise? It is important to recognize considerable variation in the research interests of faculty. Harking back to the previous sections, some pursue traditional forms of research and other "engaged scholarship." Further, faculty teaching, research, and public-service interests evolve over time.

Figure 4 provides a conceptualization of the primary areas of responsibility and activity for faculty: teaching and mentoring, research and creative work, professional competence and activity, university service (including activities related to academic management at the program, discipline, and campus-wide levels), and public/community service. Like the previous depiction of the experience of undergraduates and graduate students, the size of each sphere is only an example of a faculty member with significant research productivity. Theoretically, the weighting will vary depending on faculty members' interests, abilities, and stage in their academic careers.



Institutional Research Capacity: Most universities have had very limited formal policies and strategies for gathering
institutional data, and for employing trained staff to generate the information and analysis required for competent and
innovative management.

Institutional research (IR) is an essential activity for Flagship University. One catalyst for increasing IR capacity is the growing demand of ministries for data to meet evolving accountability schemes; various international and national ranking efforts are also leading to relatively new campus efforts to generate and maintain databases and formulate strategies for improving citation index scores and similar measures of output.

In many research-intensive universities, however, there remains a significant lack of IR capacity and of understanding, by academic leaders and by faculty, of the critical role of IR for institutional self-improvement and quality control. Flagship

Universities need to focus on their own data and analysis needs, including internal accountability efforts like program review, and not simply react to external demands. IR capability generally includes the following co-dependent functions:

- Data development and maintenance on core university activities
- Enrollment, personnel, and financial management
- Outcomes assessment, program review, accreditation
- Institutional reporting and analysis
- Strategic planning.

The model discusses many other areas of innovations, policies, and practices of Flagship Universities that may be of use to Korea's national universities. This includes examples of public-service programs including extension, the training of graduate students, and models for university management and shared governance.



But the larger message is that Flagship Universities are mindful of their global interaction and impact (including journal citations) and their regional responsibilities and influence in areas such as economic development and socio-economic mobility. They are mindful of ranking systems that essentially encourage them to be what one might call "universities of the cosmos" (e.g., with research and quality goals that are not tied to location or more directly to societal needs), but they must remain grounded in a set of values and activities that make them essential to the societies they must operate in and serve.

#### 3.b The NFU Model and Korea

While national universities in South Korea have historically enjoyed a privileged position in their higher-education system, in their chapter in the book *Envisioning the Asian New Flagship University*, Stephanie K. Kim, and Minho Yeom explain that these elite institutions face acute challenges, including the status pressure created by global rankings. Ultimately, they argue that "the future relevance of these institutions may require the adoption of a more flexible approach to excellence that strikes a balance between the ranking-dominated World Class University concept and the aspirational New Flagship University model."

Kim and Yeom pay particular attention to the network of national universities outside of Seoul and the regional economic development needs. They note the following contextual issues:

- Student and Funding for Higher Education Congregate in Seoul: Students, and their parents, now generally prefer to enter
  public and private universities in Seoul due to the possibility of superior career and job prospects, "an unsurprising outcome
  when one considers that half the country's population currently lives in Seoul and economic activity in the capital makes up
  more than half of the national economy."
- Declining Population and Brain Drain: South Korea has been experiencing an overall decline in its student population
  primarily due to declining birth rates and the desire of Korean students to go abroad for their higher education. Today, a
  larger proportion of Korean students are going overseas for their undergraduate education, whereas in the past students
  mostly went overseas to pursue graduate degrees. (However, this long-term trend is starting to slow with the increased cost
  of attending HEI's in the United States, the primary destination for Korean students seeking an education overseas, and
  increased quality of HEI's in Korea).
- Legacy of Promoting Private Higher Education: The government has met growing demand for higher education in the
  provinces not by promoting its national universities, but rather by authorizing the establishment of more private universities.
  For example, after the policy called "liberalizing university establishment regulations" was introduced in 1996, 45 new
  private universities were founded during the four-year period ending in 2000. This also means that the financial burden for
  higher education increasingly falls on students and their parents.
- Low Public Investment and Priorities: The low proportion of government aid for higher education clearly shows the
  government's principle of minimizing financial backing for higher education. Indeed, the ratio of public to private expenditure
  for higher education in South Korea is far less than the average in other OECD countries. Special funding on the basis of

government evaluation has also resulted in the establishment of institutional standards that give preference to research-intensive universities and thus engender competition among institutions. Since the launch of the Brain Korea 21 Project, a major higher education reform project initiated by the South Korean government to prepare Korean human resources for the 21st century, research output has become the primary objective when determining a university's funding status. What the Project did, however, was establish a culture of research production as the primary means of assessing a university's value.

Kim and Yeom conclude by noting that "several features of the NFU model already exist in national universities today." However, "the national universities do not necessarily formulate unique visions and goals that are both specific to the province in which they are located and relevant in the broader context of Korean higher education. This poses an obvious limitation to their future."

#### Their recommendations?

University funding is still highly dependent on an institution's ability to align itself with government-set standards of research output. Given this environment, there needs to be not only a clear differentiation in mission but also a clear differentiation in funding that applies specifically to national universities in order to be effective. This could include a resurrection of the New University of Regional Innovation (NURI) program, focused on developing areas of specialization in universities outside of Seoul linked to local industries and labor needs. ... On the whole, however, recent higher education reforms in South Korea are largely based on a blind aspiration for a World Class University concept that needs to be challenged. The government has played a leading role in setting the direction of the higher education sector through special funding schemes. As such, the government also has the capability of setting a new direction and supporting South Korea's national universities in a way that will sustain their future, driven by the more holistic, meaningful, and achievable NFU model. (p.102)

#### 4. CONCLUSIONS

Korea and California face the challenges of pursuing structural changes in their higher-education systems in the midst of declining public funding. Korea needs to coherently reorganize its system and reduce the number of HEI's, including pursuing mergers and reducing significantly the number of private institutions. Korea also has distribution problems, with enrollment too heavily concentrated in Seoul and arguably in the university sector (as opposed to more vocational and short-term degree programs that match labor needs). Related to this is the need to bolster regional economies in the urban centers outside of Seoul.

California needs a path for "smart growth" of its system, including redirecting more students toward four-year, bachelor's granting public universities. Its enrollment and labor market match are the opposite: too many students in community colleges and short-term programs and too few opportunities to enroll directly into bachelor's programs and in many graduate fields.<sup>8</sup>

Both systems face significant challenges to create a viable funding model — one with inadequate funding for national universities in an era of declining population, the other in an era of increasing demand and long-term projections of enrollment growth.<sup>9</sup>

So what lessons might Korea gain from California?

The success of California's system historically has been the devotion to a strong and consistent approach to mission differentiation and investment in its public higher-education sector, and this remains perhaps the single most important lesson or model for other nations. Within this logic, California emphasized the ideal that each public segment in a system of higher education has a distinct and equal role of significant value. This is the route toward a high quality and efficient network of colleges and universities. Might this model provide some guidance to how Korea approaches organizing its higher education system? Perhaps. But the circumstances are very different.

California's tripartite, public, multi-campus system was developed "organically" over time and supported generously by taxpayers. For example, the UC system started with the campus in Berkeley (1868) and later absorbed in 1919 a regional public teacher's college in Los Angeles (what became UCLA), creating the nation's first multi-campus system under a single governing board. From that beginning new campuses were guided and strengthened by shared governance and internal accountability policies and practices that originated at Berkeley.

California therefore created new institutions and coherently shaped the role of its various segments as the state of California grew in population, in wealth, and in its desire to promote high educational attainment rates and socio-economic mobility. Early on, the idea of mass higher education fit into notions of economic development and empowerment of the individual citizen. And

while there have been many debates regarding the size and shape of the system, it is a story of relatively consensus policymaking.

California does not, hence, provide much guidance in the difficult task of restructuring an existing and mature network of higher-education institutions, such as those found in Korea. The politics of reshaping what are politically powerful national universities, for instance, are substantial. Internationally, there are few if any grand and centralized "plans" like California's 1960 Master Plan. UC's multi-campus "One University" model might provide clues on how to create a more coherent network of national Korean universities, but the process, even if a logical policy objective, would pose significant challenges.

The difficulties of reforming mature national higher-education systems is why the most common policy initiatives by ministries seeking greater mission differentiation among its HEI's is to pursue "indirect" methods. This includes the promise of greater autonomy in internal university decision-making, combined with greater accountability or performance demands that, in turn, influence budgeting. This is, indeed, the path thus far that Korea has taken under its MOE. Yet as argued by Kim and Yeom, budget incentives from the MOE have been overly focused on certain kinds of research productivity and have diverted the behaviors of universities, and their leadership, from larger national needs.

There are then the issues of institutional missions and management capacity, along with promoting an academic culture that seeks self-improvement — the focus of the NFU model that includes the policies, practices, and initiatives of some of the best and most innovative universities in the world. The ability of Korea's national universities to pursue a mission relevant to their locality and to build an internal management capability are difficult to assess for an outsider — including improving the student experience and outcomes, raising the bar and process for faculty hiring and promotion, instituting the norms of a constructive pattern of shared governance between academic administrators and faculty, and building up greater institutional research capacity key for evidence-based decision-making.

Clearer are the conditions that can allow for national universities to pursue these goals. These include sufficient levels of autonomy, sufficient public funding schemes that bend away from a focus on research productivity linked to rankings, and an understanding that universities, and their academic culture and policies, will ultimately determine their overall quality and socioeconomic impact.

#### **ENDNOTES**

See The New Flagship University: Changing the Paradigm from Global Ranking to National Relevancy (Palgrave Macmillan 2016) and Envisioning the Asian New Flagship University: Its Past and Vital Future (with John Hawkins, Berkeley Public Policy Press and the East-West Center 2017).

- Deepti Mani and Stefan Trines, "Education in South Korea," World Education News and Reviews, WES, October 16, 2018
- See John Aubrey Douglass, The California Idea and American Higher Education (Stanford University Press, 2000)
- John Aubrey Douglass, The New Flagship University: Changing the Paradigm from Global Ranking to National Relevancy. Palgrave Macmillan, 2016.
- According to a 2011 report on UC's economic impact, "Every \$1 that the California taxpayer invests in UC and its students results in \$9.80 in gross state product and \$13.80 in overall economic output." See: Final Report The University of California's Economic Contribution to the State of California, Prepared for The University of California Office of the President, Prepared by Economic & Planning Systems, Inc. September 12, 2011.
- See "An Uncertain Future: Leading National Universities in South Korea and the Flagship Model, in Envisioning the Asian New Flagship University: Its Past and Vital Future (with John Hawkins, Berkeley Public Policy Press and the East-West Center 2017)
- See John Aubrey Douglass, "Revisionist Reflections on California's Master Plan @50," California Journal of Politics and Policy, Vol 3, Issue 1, 2011; John Aubrey Douglass, "Re-Imagining California Higher Education," Center for Studies in Higher Education, Research & Occasional Paper Series: 14.10, October 2010.
- For the UC system, see John Aubrey Douglass and Zachary Bleemer, Approaching a Tipping Point?: A History and Prospectus of Funding for the University of California. UC Cliometric History Project, Center for Studies in Higher Education, Goldman School of Public Policy, August 2018.

Education Policy Outlook: Korea, OECD, November 2016; Seung-Bo Kim and Sunwoong Kim, "Private Universities in South Korea," International Higher Education, No. 37, Fall 2004.